

## **MISSION STATEMENT**

Uley School provides a safe, inclusive learning environment that realises and values the full potential and talents of every child.

We encourage a caring community in which children and adults are treated with mutual respect.

This is fostered within a Christian ethos where quality teaching promotes high standards of behaviour and achievement and inspires pride in our society.

### **Introduction**

The Headteacher will have overall responsibility for the provision of the mathematics curriculum within the school. The day-to-day implementation of the policy is the responsibility of the maths subject leader. The policy will be reviewed every three years.

### **Description of policy formation and consultation process**

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Uley Primary School. It was formed in response to the publication of the revised National Curriculum for 5-11 year olds (Key Stages 1 & 2) in England (2000) and is based on the document 'The Primary National Strategy: Framework for teaching mathematics'. It replaces the previous policy. The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. The implementation of this policy is the responsibility of all the teaching staff.

### **General principles**

Mathematics will be taught to all pupils throughout the school in ways appropriate to their ability. It will be taught as a single subject and in cross-curricular topics.

The school Equal Opportunities Policy applies to the teaching of Mathematics, as to all other subjects. All pupils will be encouraged to work to the limit of their abilities.

### **Aims**

Mathematics is a tool for life. To function in society, we all need to be able to communicate mathematically. We must ensure that the children in our care leave our school with high standards of numeracy as well as literacy.

#### **In our teaching of mathematics at Uley, we hope to:**

- inculcate an enjoyment and love of maths
- ensure pupils are numerate
- enable pupils to have opportunities for mathematical thinking and discussion
- provide opportunities for pupils to demonstrate and use their mathematics,
- give pupils opportunities to use mathematics in everyday situations
- help pupils to understand that mathematics is a powerful tool for communication
- instil confidence at using mathematics
- help pupils to be unafraid of and to be able to use new technology
- help pupils recognise that mathematics is a search for pattern and relationship
- instil a fascination for mathematics and the manipulation of numbers

### **Planning and Delivery**

A large part of the time that children are in school is spent on mathematical activities. These activities are concerned with fulfilling and extending the requirements of the National Curriculum for Mathematics and the Primary National Strategy. The activities may be taught to whole classes, groups or groups of similar ability.

There will be a daily dedicated maths lesson.

**All the children will have opportunities to:**

- work at their own ability level
- work in pairs and in small and large groups
- work in the areas of number, measures, shape, space and data handling
- use calculators and computers
- use a wide range of mathematical tools/instruments
- rehearse mental strategies and skills

**The tasks or activities:**

- will bring together different areas of mathematics
- will be balanced between those which develop knowledge, skills and understanding, and those which develop the ability to tackle practical problems
- will promote constantly the use of mental calculation
- encourage confidence in the use of mathematical tools
- will involve both independent and co-operative work
- will be both of the kind that have exact results/answers and those that have many possible outcomes
- will encourage a positive attitude
- will be balanced between different modes of learning:
- should help children to develop their personal qualities, including:
  - ‡ motivation and willingness to 'have a go'
  - ‡ flexibility and creative thinking
  - ‡ perseverance, reliability and accuracy
  - ‡ willingness to check, monitor and control their own work
  - ‡ independence of thought and action
  - ‡ ability to co-operate within a group
  - ‡ systematic work habits
  - ‡ expectation to use a known fact to help work out unknown facts

**When communicating their mathematics, pupils need to:**

- understand what needs to be done in broad terms
- follow instructions
- discuss difficulties and ask questions
- debate possible courses of action with others
- use reference material as appropriate
- present and explain results to others
- discuss the implications and accuracy of the conclusions reached
- discuss other possible interpretations of the conclusions

Mathematics is used in other curriculum areas wherever possible or appropriate. This helps to expand and consolidate mathematical concepts and using maths in a purposeful way in everyday contexts helps the children to realise that mathematics is important in the real world.

**Classroom Organisation and Expectations**

Classroom organisation for mathematics will be such that the children are encouraged to show independence in choosing the resources/materials needed for a task and to promote self-motivation/organisation.

**We will endeavour to:**

- ensure the environment is stimulating and supportive
- create challenging activities in which children can experience success
- value the achievement of each child
- build upon the knowledge and skills which children have gained formally and informally
- give the children mathematical experiences which match their ability and stage of development, are structured and maintain a good pace
- organise both collaborative and individual activities
- make clear to the children the purpose and relevance of any mathematical activity
- encourage independent use of a variety of apparatus and equipment
- use maths in cross-curricular topics wherever appropriate
- help children reflect on each new experience
- stress the importance of, and encourage the use of, mental calculation as a first resort to any problem
- ensure children meet the same mathematical ideas in a wide variety of contexts

### **Pupils with special educational needs and individual education plans**

Teachers will aim to include all pupils fully in their daily mathematics lessons. All children benefit from the emphasis on oral and mental work and participating in watching and listening to other children demonstrating and explaining their methods. However a pupil whose difficulties are severe or complex may need to be supported with an individualised programme in the main part of the lesson.

### **Early Years (Foundation)**

The development of mathematical thought is an important area of experience for children in the Early Years. Learning in mathematics should be primarily first-hand, experiential and active, bearing in mind the requirements of the National Curriculum Foundation Stage. Play and talk are essential to the learning process.

We recognise that some children will be ready to embark upon the National Curriculum during their time in Foundation. We need to be aware of this and ensure that such children undertake work that is appropriate to their ability.

### **Years 1 - 6**

Pupils will follow the requirements of the National Curriculum (Curriculum 2000) and the programmes set out in the Primary National Strategy for their appropriate year group. The sections of the programmes of study interrelate. Developing mathematical language, reasoning and skills in applying mathematics should be set in the context of the other areas of mathematics. Measurement should be associated with handling data and shape and space. Calculating skills should be developed in number and through work on measures and handling data. Algebraic ideas of pattern and relationships should be developed in all areas of mathematics.

Special time and attention will be given to children with special needs and particularly able children.

### **Assessment and Recording**

Assessment will take place at three connected levels: short-term, medium-term and long-term. These assessments will be used to inform teaching in a continuous cycle of planning, teaching and assessment.

Short-term assessments will be an informal part of every lesson to check their understanding and give the teacher information, which will help the teacher to adjust day-to-day lesson plans.

Medium-term assessments in KS1 will take place in 'assess and review' lessons timetabled each term and will assess some of the ideas linked to the key objectives that have been covered during the term. The outcomes will be recorded by the class teacher.

KS 2 will sit the Coordination Group Publication [CGP] Continuous Assessment Tests three times a year. The questions are levelled and so children will be awarded a National Curriculum level including sub-levels.

Long-term assessments will take place towards the end of the school year to assess and review pupils' progress and attainment. These will be made through compulsory National Assessment mathematics tests for pupils in

Years 2 and 6 and supplemented by the optional QCA tests for children in Years 3, 4 & 5. Teachers will also draw upon their class record of attainment, supplementary notes and knowledge about their class to produce an annual Summative Record for the child's next teacher.

**Cross curricular**

Teachers will seek to take advantage of opportunities to make cross-curricular links. They will plan for pupils to practise and apply the skills, knowledge and understanding acquired through numeracy lessons to other areas of the curriculum.

Approved Spr: 2009.

Next Review Spr: 2012